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28. Glazing comprising:

a substrate made of coloured soda-lime glass composed of main glass-forming constituents and of colouring agents, which exhibits a selectivity (LT/ET) of at least 1.1, measured with Illuminant C for a glass thickness of 4 mm; and

a pyrolytic coating deposited on the coloured glass substrate which provides the coated glazing with an increased selectivity with respect to the selectivity of the uncoated coloured glass.

29. Glazing according to Claim 28, further characterized by at least one of the following A through J, wherein:

A. the coloured glass is a glass for which the transmission between the wavelengths 1000 and 1200 nm, for a thickness of 4 mm, is lower by at least 5 points (expressed as %: ratio of the transmitted radiation to the incident radiation) with respect to the transmission between the wavelengths 500 and 600 nm;

B. the coloured glass is a soda-lime glass coloured dark grey composed of main glass-forming constituents and of colouring agents, in which glass the elements iron, selenium, cobalt and chromium are present as colouring agents in an amount corresponding to the following proportions (expressed as percentage by weight of the glass as if present in the form shown)

$\text{Fe}_2\text{O}_3$	0.75 to 1.8%
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Co	0.0040 to 0.0180%
Se	0.0003 to 0.0040%
Cr <sub>2</sub> O <sub>3</sub>	0.0010 to 0.0100%

and the proportions of the colouring agents are such that the glass exhibits a total energy transmission, measured for a thickness of 4 mm (ET4), of between 15 and 40%, a selectivity (LTA/ET4) of at least 1.2 and an excitation purity (P) not exceeding 10%;

- C. the coating is a coating deposited by chemical vapour deposition;
- D. the coating is such that its transmission between the wavelengths 500 and 600 nm on clear glass with a thickness of 4 mm is higher by at least 3 points (expressed as percentage: ratio of the transmitted radiation to the incident radiation) with respect to the transmission between the wavelengths 1000 and 1200 nm;
- E. the coating is chosen from one of the following (i) through (v):
  - (i) oxide coating deposited by pyrolysis comprising tin and antimony in a molar ratio Sb/Sn of between 0.01 and 0.5,
  - (ii) coating deposited by pyrolysis comprising a conductive or semiconductive layer with a thickness of 15 to 500 nm formed from a material comprising a metal oxide comprising a doping agent in a ratio of 5 to 100 mol per 100 mol of metal oxide, the metal oxide being selected from one or more of the following: tungsten

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oxide ( $\text{WO}_3$ ) molybdenum trioxide ( $\text{MoO}_3$ ), niobium pentoxide ( $\text{Nb}_2\text{O}_5$ ), tantalum pentoxide ( $\text{Ta}_2\text{O}_5$ ), vanadium pentoxide ( $\text{V}_2\text{O}_5$ ) and vanadium dioxide ( $\text{VO}_2$ ),

(iii) coating deposited by pyrolysis which comprises an anti-reflective interferential stacking comprising, from the glass, a stacking of materials with alternatively high and low refractive indices,

(iv) coating which comprises a layer with an emissivity of less than 0.3, in particular a layer deposited by pyrolysis based on fluorine-doped tin oxide, and

(v) titanium nitride coating deposited by pyrolysis;

- F. the coated substrate is bent and/or heat treated, in particular annealed or tempered;
- G. the light reflection factor (LR) is less than 13%;
- H. the dominant transmitted wavelength in the visible spectrum of the coated substance is less than the dominant transmitted wavelength of the uncoated substrate;
- I. the coating deposited on the coloured glass is such that if applied to 4mm thick clear glass the so coated glass would have a light transmission factor measured with Illuminant C of less than or equal to 65%; and
- J. the glazing is for a vehicle of the motor vehicle or train type.

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30. Glazing according to claim 29 further characterized by at least two of the features A through J.

31. Glazing according to claim 29 further characterized by all of the features A through J.

32. Glazing according to Claim 28, further characterized by at least one of the following A through J, wherein:

- A. the coloured glass is a glass for which the transmission between the wavelengths 1000 and 1200 nm, for a thickness of 4 mm, is lower by at least 5 points (expressed as %: ratio of the transmitted radiation to the incident radiation) with respect to the transmission between the wavelengths 500 and 600 nm;
- B. the coloured glass is a green-coloured soda-lime glass which comprises the following percentages by weight of colouring agents, the total amount of iron being expressed in the form of  $\text{Fe}_2\text{O}_3$ :

$\text{Fe}_2\text{O}_3$	0.7 to 1.3%
$\text{FeO}$	0.18 to 0.27%
Co	0 to 0.0040%
$\text{V}_2\text{O}_5$	0.0050 to 0.1%

and which exhibits, under Illuminant A and for a glass thickness of 4 mm, a light transmission (LTA4) of between 40 and 70% and a selectivity (LTA/ET4) of greater than or equal to 1.50;

- C. the coating is a coating deposited by chemical vapour deposition;
- D. the coating is such that its transmission between the wavelengths 500 and 600 nm on clear glass with a thickness of 4 mm is higher by at least 3 points (expressed as percentage: ratio of the transmitted radiation to the incident radiation) with respect to the transmission between the wavelengths 1000 and 1200 nm;
- E. the coating is chosen from one of the following (i) through (v):
- (i) oxide coating deposited by pyrolysis comprising tin and antimony in a molar ratio Sb/Sn of between 0.01 and 0.5,
  - (ii) coating deposited by pyrolysis comprising a conductive or semiconductive layer with a thickness of 15 to 500 nm formed from a material comprising a metal oxide comprising a doping agent in a ratio of 5 to 100 mol per 100 mol of metal oxide, the metal oxide being selected from one or more of the following: tungsten oxide ( $\text{WO}_3$ ) molybdenum trioxide ( $\text{MoO}_3$ ), niobium pentoxide ( $\text{Nb}_2\text{O}_5$ ), tantalum pentoxide ( $\text{Ta}_2\text{O}_5$ ), vanadium pentoxide ( $\text{V}_2\text{O}_5$ ) and vanadium dioxide ( $\text{VO}_2$ ),
  - (iii) coating deposited by pyrolysis which comprises an anti-reflective interferential stacking comprising, from the glass, a stacking of materials with alternatively high and low refractive indices,

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(iv) coating which comprises a layer with an emissivity of less than 0.3, in particular a layer deposited by pyrolysis based on fluorine-doped tin oxide, and  
 (v) titanium nitride coating deposited by pyrolysis;

- F. the coated substrate is bent and/or heat treated, in particular annealed or tempered;
- G. the light reflection factor (LR) is less than 13%;
- H. the dominant transmitted wavelength in the visible spectrum of the coated substance is less than the dominant transmitted wavelength of the uncoated substrate;
- I. the coating deposited on the coloured glass is such that if applied to 4mm thick clear glass the so coated glass would have a light transmission factor measured with Illuminant C of less than or equal to 65%; and
- J. the glazing is for a vehicle of the motor vehicle or train type.

33. Glazing according to claim 32 further characterized by at least two of the features A through J.

34. Glazing according to claim 32 further characterized by all of the features A through J.

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 Enclosed

35. Glazing according to Claim 28, further characterized by at least one of the following A through J, wherein:

- A. the coloured glass is a glass for which the transmission between the wavelengths 1000 and 1200 nm, for a thickness of 4 mm, is lower by at least 5 points (expressed as %: ratio of the transmitted radiation to the incident radiation) with respect to the transmission between the wavelengths 500 and 600 nm;
- B. the coloured glass is a grey-green soda-lime glass composed of main glass-forming constituents and of colouring agents which comprises less than 0.4% by weight of FeO and from 0.9 to 1.8% of Fe<sub>2</sub>O<sub>3</sub>, which has an excitation purity of more than 5% and which exhibits, under Illuminant A and for a glass thickness of 4 mm, a light transmission (LTA<sub>4</sub>) of greater than 30%, a selectivity (LTA/ET) of greater than 1.55 and an ultraviolet radiation transmission (UVT<sub>4</sub>) of less than 10%;
- C. the coating is a coating deposited by chemical vapour deposition;
- D. the coating is such that its transmission between the wavelengths 500 and 600 nm on clear glass with a thickness of 4 mm is higher by at least 3 points (expressed as percentage: ratio of the transmitted radiation to the incident radiation) with respect to the transmission between the wavelengths 1000 and 1200 nm;
- E. the coating is chosen from one of the following (i) through (v):

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(i) oxide coating deposited by pyrolysis comprising tin and antimony in a molar ratio Sb/Sn of between 0.01 and 0.5,

(ii) coating deposited by pyrolysis comprising a conductive or semiconductive layer with a thickness of 15 to 500 nm formed from a material comprising a metal oxide comprising a doping agent in a ratio of 5 to 100 mol per 100 mol of metal oxide, the metal oxide being selected from one or more of the following: tungsten oxide ( $\text{WO}_3$ ) molybdenum trioxide ( $\text{MoO}_3$ ), niobium pentoxide ( $\text{Nb}_2\text{O}_5$ ), tantalum pentoxide ( $\text{Ta}_2\text{O}_5$ ), vanadium pentoxide ( $\text{V}_2\text{O}_5$ ) and vanadium dioxide ( $\text{VO}_2$ ),

(iii) coating deposited by pyrolysis which comprises an anti-reflective interferential stacking comprising, from the glass, a stacking of materials with alternatively high and low refractive indices,

(iv) coating which comprises a layer with an emissivity of less than 0.3, in particular a layer deposited by pyrolysis based on fluorine-doped tin oxide, and

(v) titanium nitride coating deposited by pyrolysis;

F. the coated substrate is bent and/or heat treated, in particular annealed or tempered;

G. the light reflection factor (LR) is less than 13%;

H. the dominant transmitted wavelength in the visible spectrum of the coated substance is less than the dominant transmitted wavelength of the uncoated substrate;

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- I. the coating deposited on the coloured glass is such that if applied to 4mm thick clear glass the so coated glass would have a light transmission factor measured with Illuminant C of less than or equal to 65%; and
- J. the glazing is for a vehicle of the motor vehicle or train type.


36. Glazing according to claim 35 further characterized by at least one of the features A through J.

37. Glazing according to claim 35 and further characterized by all of the features A through J.

~~38. Glazing according to Claim 28, further characterized by at least one of the following A through J, wherein:~~

- A. the coloured glass is a glass for which the transmission between the wavelengths 1000 and 1200 nm, for a thickness of 4 mm, is lower by at least 5 points (expressed as %: ratio of the transmitted radiation to the incident radiation) with respect to the transmission between the wavelengths 500 and 600 nm;
- B. the coloured glass is a coloured soda-lime glass composed of main glass-forming constituents and of colouring agents which comprises from 0.40 to 0.52% by weight of FeO and which exhibits, under Illuminant A and for a glass

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thickness of 4 mm, a light transmission (LTA4) of less than 70%, a selectivity (LTA/ET4) of greater than 1.65 and an ultraviolet radiation transmission (UVT4) of less than 8%;

- C. the coating is a coating deposited by chemical vapour deposition;
- D. the coating is such that its transmission between the wavelengths 500 and 600 nm on clear glass with a thickness of 4 mm is higher by at least 3 points (expressed as percentage: ratio of the transmitted radiation to the incident radiation) with respect to the transmission between the wavelengths 1000 and 1200 nm;
- E. the coating is chosen from one of the following (i) through (v):
- (i) oxide coating deposited by pyrolysis comprising tin and antimony in a molar ratio Sb/Sn of between 0.01 and 0.5,
  - (ii) coating deposited by pyrolysis comprising a conductive or semiconductive layer with a thickness of 15 to 500 nm formed from a material comprising a metal oxide comprising a doping agent in a ratio of 5 to 100 mol per 100 mol of metal oxide, the metal oxide being selected from one or more of the following: tungsten oxide ( $\text{WO}_3$ ) molybdenum trioxide ( $\text{MoO}_3$ ), niobium pentoxide ( $\text{Nb}_2\text{O}_5$ ), tantalum pentoxide ( $\text{Ta}_2\text{O}_5$ ), vanadium pentoxide ( $\text{V}_2\text{O}_5$ ) and vanadium dioxide ( $\text{VO}_2$ ),

(iii) coating deposited by pyrolysis which comprises an anti-reflective interferential stacking comprising, from the glass, a stacking of materials with alternatively high and low refractive indices,

(iv) coating which comprises a layer with an emissivity of less than 0.3, in particular a layer deposited by pyrolysis based on fluorine-doped tin oxide, and

(v) titanium nitride coating deposited by pyrolysis;

F. the coated substrate is bent and/or heat treated, in particular annealed or tempered;

G. the light reflection factor (LR) is less than 13%;

H. the dominant transmitted wavelength in the visible spectrum of the coated substance is less than the dominant transmitted wavelength of the uncoated substrate;

I. the coating deposited on the coloured glass is such that if applied to 4mm thick clear glass the so coated glass would have a light transmission factor measured with Illuminant C of less than or equal to 65%; and

J. the glazing is for a vehicle of the motor vehicle or train type.

39. Glazing according to claim 38 further characterized by at least two of the features A through J.

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40. Glazing according to claim 38 further characterized by all of the features A through J.

41. Glazing according to claim 28 further characterized by one of the following:

- A. the selectivity of the uncoated coloured glass is at least 1.3;
- B. the selectivity of the uncoated coloured glass is less than or equal to 2.

42. Glazing according to claim 28 characterized in that the selectivity of the coated substrate is greater than 2.

43. Glazing according to Claim 28, further characterized by one of the following:

- A. the selectivity is increased by at least 3% with respect to the selectivity of the uncoated coloured glass;
- B. the selectivity is increased by at least 10% with respect to the selectivity of the uncoated coloured glass.

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44. Glazing according to claim 28, characterized by one of the following:
- A. the coating comprises an underlayer between the substrate and the coating deposited by pyrolysis;
  - B. that the coating is an oxide coating which is preferably deposited by vapour-phase pyrolysis comprises tin and antimony in a molar ratio Sb/Sn of between 0.04 and 0.16;
  - C. the coating is an oxide coating deposited by pyrolysis which comprises tin and antimony in a molar ratio Sb/Sn of between 0.01 and 0.5 and its thickness is between 250 and 500 nm.
45. Glazing according to claim 28, characterized by one of the following:
- A. the coating deposited on the coloured glass is such that if applied to 4 mm thick clear glass the so coated glass would have a light transmission factor measured with illuminant C of less than or equal to 70%;
  - B. the coating deposited on the coloured glass is such that if applied to 6 mm thick clear glass the so coated glass would have a light transmission factor measured with illuminant C of less than or equal to 65%;

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- C. the light transmission factor of the coated glazing is less than the light transmission factor of the uncoated glass substrate by a factor of greater than 10% calculated according to the formula

$$\frac{LT_{\text{uncoated substrate}} - LT_{\text{coated glazing}}}{LT_{\text{uncoated substrate}}} \times 100.$$

- D. the light transmission factor of the coated glazing is less than the light transmission factor of the uncoated glass substrate by a factor of greater than 15% calculated according to the formula

$$\frac{LT_{\text{uncoated substrate}} - LT_{\text{coated glazing}}}{LT_{\text{uncoated substrate}}} \times 100.$$

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